

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1 – 37. (Canceled)

38. (New) A computer readable medium bearing a computer readable representation of an object that is serialized for efficient retrieval by computer hardware, the computer readable representation comprising:

at least one binary fragment comprising a binary fragment header and a binary fragment payload;

wherein the binary fragment header comprises a type field and a length field;

wherein the type field indicates the fragment is a binary fragment;

wherein the length field indicates a length of the binary fragment payload;

wherein the payload comprises a plurality of primitive data members in storage engine record format; and

wherein said plurality of primitive data members are all of the primitive data members of the object.

39. (New) The computer readable medium of claim 38, wherein the type field indicates that the binary fragment is the only fragment of the object.

40. (New) The computer readable medium of claim 38, further comprising:

at least one Large Object (LOB) fragment comprising a LOB fragment header and a LOB fragment payload;

wherein the LOB header comprises a LOB type field, a value type field, and a LOB length field;

wherein the LOB type field indicates the LOB fragment is a LOB fragment;

wherein the value type field indicates whether the LOB fragment payload comprises an inline LOB or a pointer to a LOB location;

wherein the LOB length field indicates the a length of the LOB fragment payload.

41. (New) The computer readable medium of claim 40, wherein the LOB fragment payload comprises a LOB.

42. (New) The computer readable medium of claim 40, wherein the LOB fragment payload comprises a pointer to a LOB location.

43. (New) The computer readable medium of claim 40, wherein the value type field indicates whether the LOB fragment payload comprises an inline LOB, a pointer to a LOB location, or a cell reference.

44. (New) The computer readable medium of claim 38, further comprising a terminator fragment that marks the end of the object, said terminator fragment comprising a terminator type field indicating the terminator fragment is a terminator fragment.

45. (New) The computer readable medium of claim 38, further comprising:
a collection start fragment comprising a collection start header;
wherein the collection start header comprises a collection start type field and a bit field;
wherein the collection start type field indicates the collection start fragment is a
collection start fragment;
wherein the bit field indicates whether a plurality of collection element fragments are
ordered or unordered.

46. (New) The computer readable medium of claim 45, further comprising:
at least one collection element fragment comprising a collection element header and
collection element payload;
wherein the collection element header comprises a collection element type field and a
collection element length field;

wherein the collection element type field indicates the collection element fragment is a collection element fragment;

wherein the collection element length field indicates the a length of the collection element payload.

47. (New) The computer readable medium of claim 46, wherein the collection element payload comprises a data member in a collection of data members corresponding to said collection start fragment.

48. (New) The computer readable medium of claim 46, wherein the collection element header further comprises a collection element locator field that provides a unique location of a data member in a collection of data members.

49. (New) A computer readable medium bearing a computer readable representation of an object that is serialized for efficient retrieval by computer hardware, the computer readable representation comprising:

at least one Large Object (LOB) fragment comprising a LOB fragment header and a LOB fragment payload;

wherein the LOB header comprises a LOB type field, a value type field, and a LOB length field;

wherein the LOB type field indicates the LOB fragment is a LOB fragment;

wherein the value type field indicates whether the LOB fragment payload comprises an inline LOB or a pointer to a LOB location;

wherein the LOB length field indicates the a length of the LOB fragment payload.

50. (New) The computer readable medium of claim 49, wherein the LOB fragment payload comprises a LOB.

51. (New) The computer readable medium of claim 49, wherein the LOB fragment payload comprises a pointer to a LOB location.

52. (New) The computer readable medium of claim 49, wherein the value type field indicates whether the LOB fragment payload comprises an inline LOB, a pointer to a LOB location, or a cell reference.

53. (New) The computer readable medium of claim 49, further comprising:
a collection start fragment comprising a collection start header;
wherein the collection start header comprises a collection start type field and a bit field;
wherein the collection start type field indicates the collection start fragment is a
collection start fragment;
wherein the bit field indicates whether a plurality of collection element fragments are
ordered or unordered.

54. (New) The computer readable medium of claim 53, further comprising:
a collection element fragment comprising a collection element header and collection
element payload;
wherein the collection element header comprises a collection element type field and a
collection element length field;
wherein the collection element type field indicates the collection element fragment is a
collection element fragment;
wherein the collection element length field indicates the a length of the collection
element payload.

55. (New) A computer readable medium bearing a computer readable representation of an object
that is serialized for efficient retrieval by computer hardware, the computer readable
representation comprising:

a collection start fragment comprising a collection start header;

wherein the collection start header comprises a collection start type field and a bit field;
wherein the collection start type field indicates the collection start fragment is a
collection start fragment;
wherein the bit field indicates whether a plurality of collection element fragments are
ordered or unordered;
at least one collection element fragment comprising a collection element header and
collection element payload;
wherein the collection element header comprises a collection element type field and a
collection element length field;
wherein the collection element type field indicates the collection element fragment is a
collection element fragment;
wherein the collection element length field indicates the a length of the collection
element payload.

56. (New) The computer readable medium of claim 55, wherein the collection element payload
comprises a data member in a collection of data members corresponding to said collection start
fragment.

57. (New) The computer readable medium of claim 55, wherein the collection element header
further comprises a collection element locator field that provides a unique location of a data
member in a collection of data members.